

2010-09-28 Tuesday Morning Notes

Tuesday, September 28, 2010
6:00 AM

Stacking

- <stacking rate> = 26.1mA/hr
- <production> = 20.0 e-6/p
- <POT> = 8.45 Tp

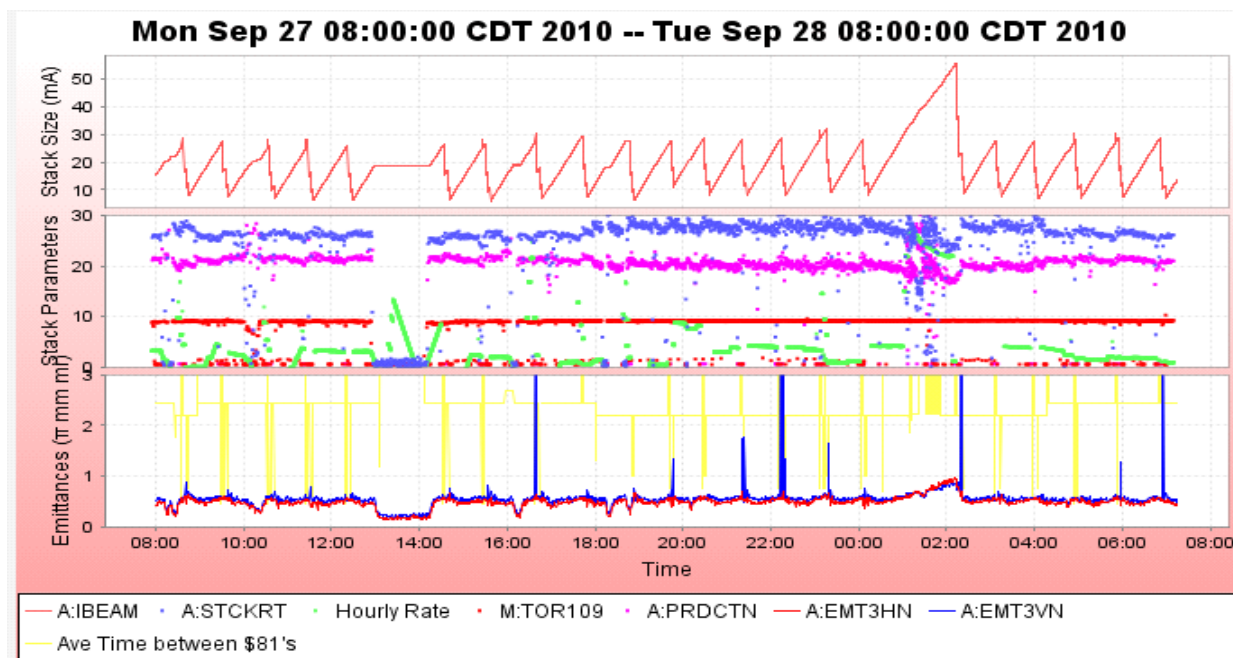
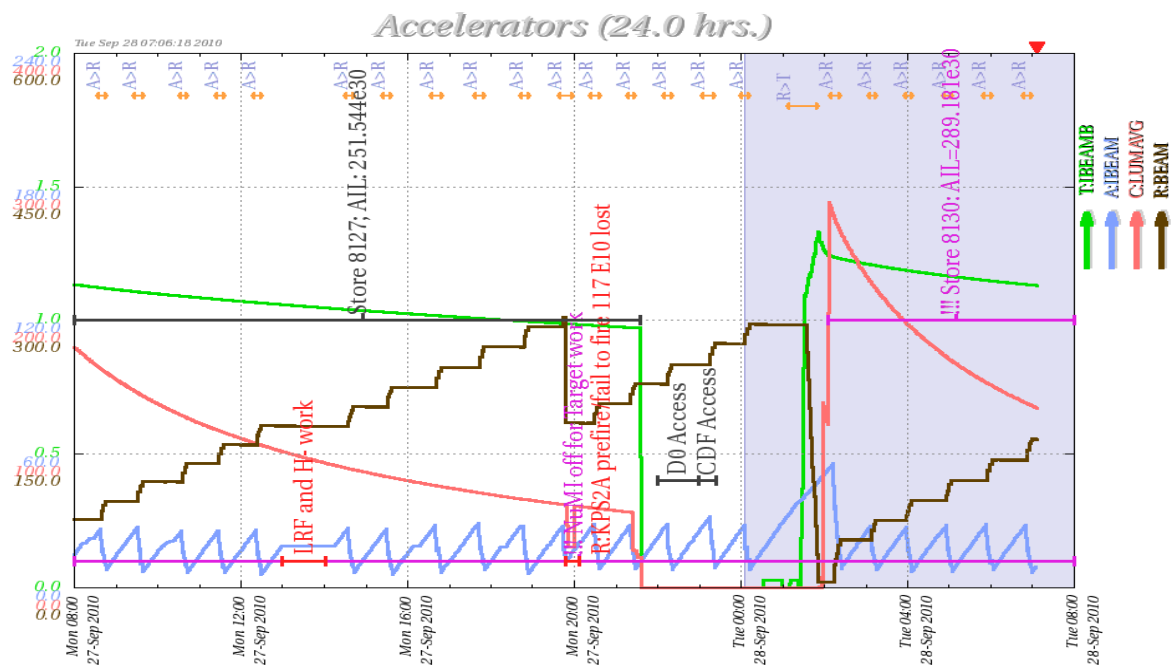
Transfers

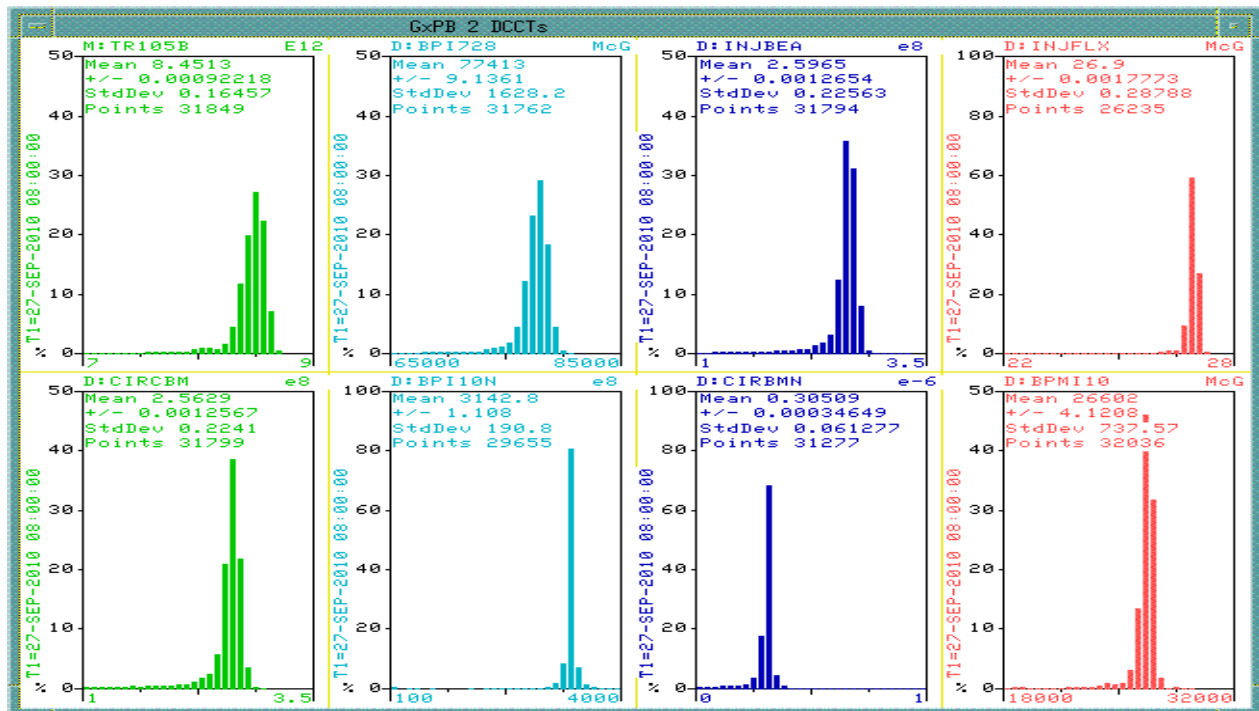
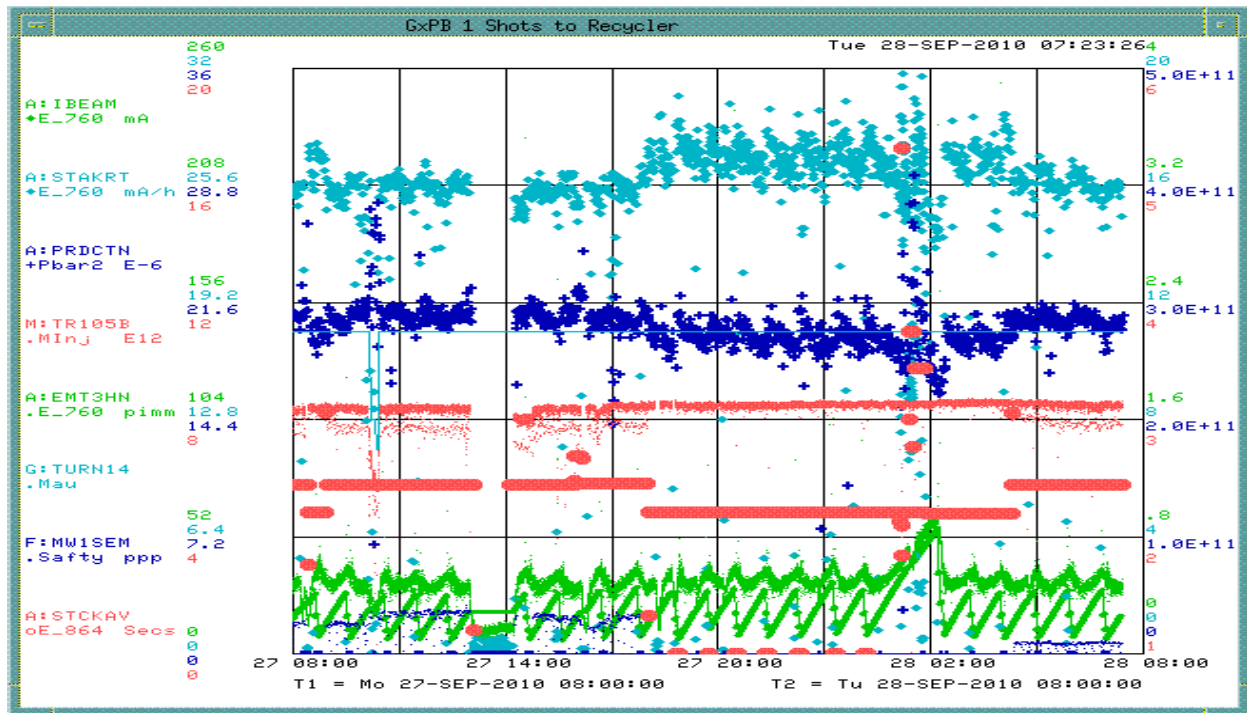
- Unstacked 533e10 in 66 transfers over 22 sets.
- Overall efficiency was 95.9% if you exclude transfer 20913, where the RR lost 117e10 due to an R:KPS2A prefire/fail to fire.

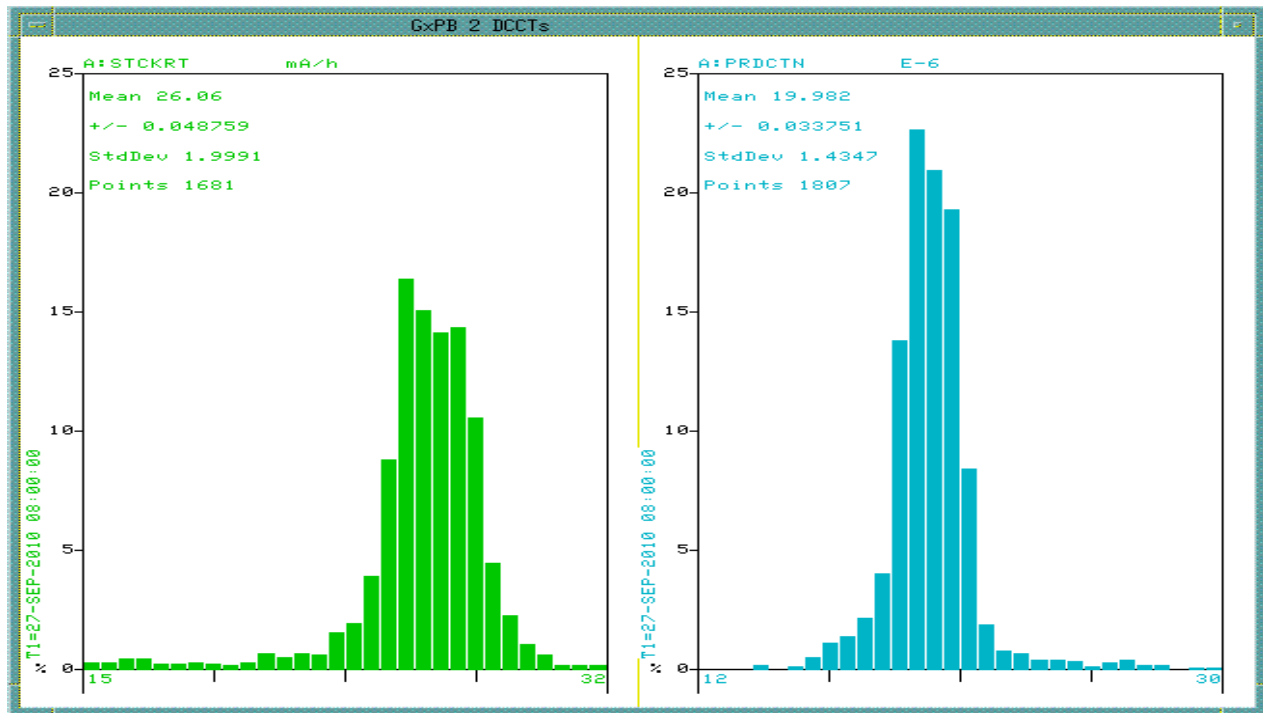
The Numbers

- Stacking
 - Pbars stacked: 536.79 E10
 - Time stacking: 22.70 Hr
 - Average stacking rate: 23.64 E10/Hr
- Uptime
 - Number of pulses while in stacking mode: 34323
 - Number of pulses with beam: 32482
 - Fraction of up pulses was: 94.64%
- The uptime's effect on the stacking numbers
 - Corrected time stacking: 21.49 Hr
 - Possible average stacking rate: 24.98 E10/Hr
 - Could have stacked: 567.21 E10/Hr
- Recycler Transfers
 - Pbars sent to the Recycler: 526.60 E10
 - Number of transfers : 66
 - Number of transfer sets: 23
 - Average Number of transfer per set: 2.87
 - Time taken to shoot including reverse proton tuneup: 00.23 Hr
 - Transfer efficiency: 116.99%
- Other Info
 - Average POT : 8.43 E12
 - Average production: 19.61 pbars/E6 protons
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Plots







Pbar Source Accumulator, Debuncher, AP1, AP2, & AP3 Beamline Views

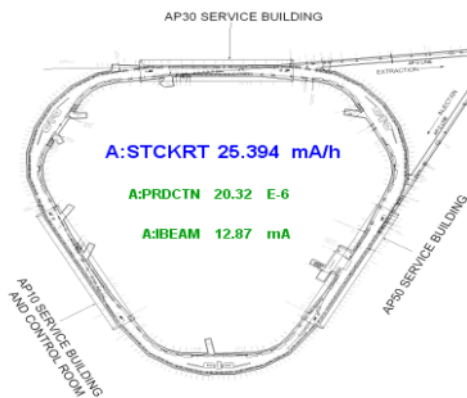
Program Running: Yes

V:APSMOD: Stacking

A:IBMINJ 15.35 e07 A:FRWDTH 24.156 Hz A:EMT3HN 0.463 pimm
 A:LFTOVR 2.944 % A:CENFRQ 628896. Hz A:EMT3VN 0.519 pimm
 A:STMEDS 11.816 MeV A:R2DDS1 628897. Hz A:XFRNXT 75.0 mA
 A:R1HLFB 26.174 kV

M:EFF 0.0
 M:TR105B 8.493 E12

G:TURN14 11.0 Turns
 E:14SUM3 0.0 E12



D:724TOR 8.701 E09
 G:RD2116 3.15 mRem

D:INJFLX 26.999 McG
 D:FLXBTL 1.548 uSec
 D:R1HLFB 5.075 MV
 D:BPMI10 26315.3 McG
 Z:PRDCTD 31.355 E-6

Pbar Beamlines BPM House Status

P1
 P2
 AP1
 AP2 F27
 AP2 AP50

0x80 Event Detected ☐

A:STCKAV 2.45 Secs

Overthruster Status

Column 1 Number _0_Pbar Transfer Shot #	Column 4 Number_3_Transfer Time	Column 21 Number _20_A-I BEAMB sampled on \$91 (A-BEA M7), E10	Column 22 Number _21_A-I BEAMB sampled on \$94 (A-BEA M9), E10	Unstacked (mA)	Column 23 Number _22_R: BEAMS (R-BEA ME0(0)) pre-fer E10	Column 24 Number _23_R: BEAM (R-BEA ME0(1)) post-fer, E10	Stashed	Acc to RR Eff	Acc to MI Eff	Acc to MI2 Eff	Acc to MI * Acc to MI2 Efficiency	Trans fers	Sets	Column 5 Number_4_Acc Horizontal Emittance	Column 6 Number_5_Acc Vertical Emittance	Column 8 Number_7_Acc Longitudinal Emittance	
	Totals =>			533.08			387.36	72.66%	97.05%	97.44%	94.57%	66	22	5.0166	5.1481	1.9596	
	Daily Average =>			533.08			387.36					66	22				
20923	Tuesday, September 28, 2010	5:54	28.68	7.41	23.89	120.49	143.52	23.13	96.82%	96.57%	96.74%	93.43%	3	1	4.848	5.184	1.972
20922	Tuesday, September 28, 2010	4:56	28.10	6.96	23.67	97.90	120.60	22.82	96.40%	97.49%	97.25%	94.81%	3	1	4.841	4.886	1.944
20921	Tuesday, September 28, 2010	3:58	27.50	6.77	23.12	75.84	98.05	22.26	96.29%	96.18%	96.11%	92.44%	3	1	4.778	5.119	1.95
20920	Tuesday, September 28, 2010	3:07	27.87	7.47	23.14	53.79	75.95	22.25	96.12%	96.25%	97.70%	94.04%	3	1	4.875	5.177	2.001
20919	Tuesday, September 28, 2010	2:13	55.96	8.34	51.13	6.62	53.88	47.64	93.18%	95.08%	94.99%	90.32%	4	1	6.609	6.095	1.854
20918	Tuesday, September 28, 2010	0:05	28.34	7.83	22.99	274.15	296.00	22.06	95.96%	96.88%	98.26%	95.20%	3	1	5.219	5.072	1.967
20917	Monday, September 27, 2010	23:15	31.94	8.97	25.49	250.23	274.60	24.53	96.22%	97.49%	98.85%	96.37%	3	1	5.47	5.386	1.978
20916	Monday, September 27, 2010	22:13	28.49	7.83	23.25	228.60	250.64	22.22	95.59%	97.47%	98.15%	95.67%	3	1	4.836	5.365	1.973
20915	Monday, September 27, 2010	21:20	28.31	7.70	23.06	206.88	228.98	22.29	96.67%	97.89%	97.24%	95.19%	3	1	5.076	5.218	1.976
20914	Monday, September 27, 2010	20:29	28.88	8.00	23.42	184.81	207.19	22.52	96.14%	98.29%	100.05%	98.34%	3	1	5.043	5.191	1.981
20913	Monday, September 27, 2010	19:43	27.85	11.04	18.08	292.85	186.31	-106.45	-588.69%	96.31%	96.57%	93.00%	2	1	5.043	4.988	1.97
20912	Monday, September 27, 2010	18:47	27.61	6.05	24.03	270.18	293.29	23.26	96.80%	97.96%	98.22%	96.22%	3	1	3.942	3.97	1.902
20911	Monday, September 27, 2010	17:43	29.50	7.58	24.57	247.24	270.74	23.69	96.41%	96.09%	95.93%	92.18%	3	1	5.09	5.123	1.983
20910	Monday, September 27, 2010	16:40	28.24	6.87	23.94	224.72	247.65	23.07	96.37%	97.94%	98.55%	96.53%	3	1	5.087	5.117	1.956
20909	Monday, September 27, 2010	15:30	26.52	6.01	23.05	202.95	225.11	22.32	96.81%	98.77%	98.31%	97.10%	3	1	4.934	5.024	1.963
20908	Monday, September 27, 2010	14:34	26.81	6.37	22.98	181.45	203.25	21.91	95.38%	97.18%	98.25%	95.48%	3	1	4.803	5.287	1.969
20907	Monday, September 27, 2010	12:22	25.93	6.07	22.49	160.38	181.91	21.61	96.09%	97.20%	97.15%	94.43%	3	1	4.76	5.14	1.957
20906	Monday, September 27, 2010	11:28	25.99	6.23	22.09	139.54	160.57	21.15	95.74%	97.49%	98.44%	95.96%	3	1	4.697	5.056	1.877
20905	Monday, September 27, 2010	10:35	25.80	6.62	21.75	118.86	139.71	20.93	96.22%	96.17%	97.48%	93.75%	3	1	4.967	4.967	1.977
20904	Monday, September 27, 2010	9:31	27.45	7.18	22.91	97.20	119.11	22.01	96.05%	97.58%	96.98%	94.63%	3	1	4.999	5.088	1.969
20903	Monday, September 27, 2010	8:38	26.73	7.64	21.71	76.59	97.30	20.76	95.66%	95.96%	96.50%	92.60%	3	1	5.318	5.55	2.006
20902	Monday, September 27, 2010	7:34	26.79	7.02	22.35	55.42	76.74	21.41	95.82%	99.06%	98.62%	97.69%	3	1	5.131	5.256	1.987

Column 1 Number _0_Pbar Transfer Shot #	Column 4 Number_3_Transfer Time	Column 21 Number _20_A-I BEAMB sampled on \$91 (A-BEA M7), E10	Column 22 Number _21_A-I BEAMB sampled on \$94 (A-BEA M9), E10	Unstacked (mA)	Column 23 Number _22_R: BEAMS (R-BEA ME0(0)) pre-fer E10	Column 24 Number _23_R: BEAM (R-BEA ME0(1)) post-fer, E10	Stashed	Acc to RR Eff	Acc to MI Eff	Acc to MI2 Eff	Acc to MI * Acc to MI2 Efficiency	Trans fers	Sets	Column 5 Number_4_Acc Horizontal Emittance	Column 6 Number_5_Acc Vertical Emittance	Column 8 Number_7_Acc Longitudinal Emittance
	Totals =>			515.00			493.81	95.89%	97.08%	97.47%	94.62%	66	21	5.0154	5.1558	1.9591
	Daily Average =>			515.00			493.81					66	21			

